**Cataplexy** is a sudden and transient episode of muscle weakness accompanied by full conscious awareness, typically triggered by emotions such as laughing, crying, terror, etc. It is the cardinal symptom of narcolepsy with cataplexy affecting roughly 70% of people who have [narcolepsy](https://en.wikipedia.org/wiki/Narcolepsy) and is caused by an autoimmune destruction of the neurotransmitter [hypocretin](https://en.wikipedia.org/wiki/Hypocretin), which regulates wakefulness. Cataplexy without narcolepsy is rare and the cause is unknown. Cataplexy is considered secondary when it is due to specific lesions in the brain that cause a depletion of the hypocretin neurotransmitter.

**Treatment**

Cataplexy is treated with medications. There are no behavioral treatments. People with [narcolepsy](https://en.wikipedia.org/wiki/Narcolepsy) will often try to avoid thoughts and situations that they know are likely to evoke strong emotions because they know that these emotions are likely to trigger cataplectic attacks

[**Parkinson's disease**](http://www.mayoclinic.org/diseases-conditions/parkinsons-disease/basics/definition/con-20028488)is a progressive disorder of the nervous system that affects movement. It develops gradually, sometimes starting with a barely noticeable tremor in just one hand. But while a tremor may be the most well-known sign of Parkinson's disease, the disorder also commonly causes stiffness or slowing of movement.

In the early stages of Parkinson's disease, your face may show little or no expression, or your arms may not swing when you walk. Your speech may become soft or slurred. Parkinson's disease symptoms worsen as your condition progresses over time.

## Treatment Although Parkinson's disease can't be cured, medications may markedly improve your symptoms. In occasional cases, your doctor may suggest surgery to regulate certain regions of your brain and improve symptoms.

## What Causes Parkinson's Disease? A Shortage of Dopamine

Parkinson's disease occurs when nerve cells, or neurons, in an area of the brain that controls movement become impaired and/or die. Normally, these neurons produce an important brain chemical known as *dopamine*, but when the neurons die or become impaired, they produce less dopamine. This shortage of dopamine causes the movement problems of people with Parkinson's

**Schizophrenia** is a severe brain disorder in which people interpret reality abnormally. Schizophrenia may result in some combination of hallucinations, delusions, and extremely disordered thinking and behavior.

**Symptoms**

 Delusions - bizarre, false beliefs

These beliefs seem real to the person with schizophrenia, but they are not real. For example, a person may believe that aliens or spies are controlling his or her behavior, mind and thoughts. Sometimes these delusions can be paranoid in nature. People with paranoia have an unreal fear or suspicion that someone is "out to get them." Delusions may also be of grandiosity. In these cases, people believe that they are someone important, such as a president, king or prime minister.

 Hallucinations - bizarre, unreal perceptions of the environment

These hallucinations can be:

1. Auditory (hearing voices) - sometimes the "voices" tell a person to do something
2. Visual (seeing lights, objects or faces)
3. Olfactory (smelling things)
4. Tactile (for example, feelings that bugs are crawling on or under the skin)

 Disorganized Thinking/Speech

Abnormal thoughts are usually measured by disorganized speech. People with schizophrenia speak very little; others have speech that is disjointed. Sometimes the person will change the topic midway through a sentence.

 Negative Symptoms - the absence of normal behavior

Delusions, hallucinations and abnormal speech indicate the *presence* of abnormal behavior. Negative symptoms include social withdrawal, absence of emotion and expression, reduced energy, motivation and activity. Sometimes people with schizophrenia have poor hygiene and grooming habits.

 Catatonia - immobility and "waxy flexibility"

Catatonia is a negative symptom where people become fixed in a single position for a long period of time. "Waxy flexibility" describes how a person's arms will remain frozen in a particular position if they are moved by someone else

**What are the causes of schizophenia? Neurotransmitters.** Many studies have investigated the possible role of brain neurotransmitters in the development of schizophrenia. Most of these studies have focused on the neurotransmitter called dopamine. The "dopamine theory of schizophrenia" states that schizophrenia is caused by an overactive dopamine system in the brain.

**Menengitis**

**What Is Meningitis?**

The central nervous system (brain and spinal cord) is surrounded by **cerebrospinal** (say: suh-REE-bro-SPY-nul) **fluid**. This fluid acts to cushion and protect the central nervous system when you move around. Even more protection is given by the **meninges** (say: muh-NIN-jeez), which are the membranes that cover the [brain](http://kidshealth.org/kid/body/brain_noSW.html) and spinal cord.

**Meningitis** (say: men-un-JYE-tus) is a disease involving inflammation (swelling), or irritation, of the meninges. There are different kinds of meningitis, but most of the time it is caused by germs, especially viruses.

Meningitis gets attention because it not only makes a person feel sick, it can have lasting effects on a person's ability to think and learn. It also can cause hearing loss. But many people recover from the infection without permanent damage. And the illness is so rare, you may never know anyone who gets it.

**What Are the Symptoms of Meningitis?**

Usually, someone with meningitis is very sick. Symptoms may include:

* a very bad [headache](http://kidshealth.org/kid/ill_injure/sick/headache.html) that won't go away
* neck stiffness
* back stiffness
* eye pain when exposed to light
* nausea, or being sick to the stomach
* [vomiting](http://kidshealth.org/kid/talk/yucky/puke.html), or throwing up
* body aches
* fever
* feeling very sleepy or unable to fully wake up
* feeling very confused or out of it

**Treatments**

Strong antibiotic medicine will be given through an [IV](http://kidshealth.org/kid/word/i/word_iv.html) (a thin tube that goes into a vein to give medicine) to get rid of the bacteria. Fluids containing glucose (sugar) and minerals may also be given through the IV to help a person recover.

Viral meningitis can also be serious, but usually is not as bad as meningitis caused by bacteria. Someone with viral meningitis may still need to be in the hospital for a few days and it may take weeks before he or she is feeling better. Antibiotics do not work against viruses, so a person with viral meningitis will need lots of rest to fight off the infection.

**Questions:**

1. Cataplexy is s caused by an autoimmune destruction of the neurotransmitter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What is the treatment for cataplexy?
3. What do the early stages of Prakinson’s look like? (early symptoms?)
4. What causes Parkinson’s?
5. Are there treatment options for Parkinson’s? If so, what are they?
6. What is schizophrenia?
7. What are some symptoms of schizophrenia?
8. What causes schizophrenia?
9. Are there treatment options for schizophrenia? If so, what are they?
10. What is bacterial meningitis and what are some of the symptoms?
11. Is there a treatment for meningitis? If so, what is it?